

IN THE CLAIMS:

Please amend claim 1 as follows. The following listing of claims should replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended). An image data acquisition method comprising:

scanning a sample, which includes a plurality of spots on a substrate, with a light beam;

5 acquiring scanned image data by receiving light from the sample; and

sequentially storing obtaining the acquired scanned image data obtained by scanning a region of a predetermined size every time a region scanned with the light reaches a predetermined 10 size, the region having a plurality of scanning lines including a start scanning line and a stop scanning line; and

determining a fluorescence intensity of at least the stop scanning line, wherein if the fluorescence intensity of the stop scanning line is greater than a predetermined threshold, a position of the stop scanning line is adjusted such that the

fluorescence intensity of the adjusted stop scanning line is less than the predetermined threshold wherein the adjusted stop scanning line does not overlap with the plurality of spots on the substrate wherein the size of the scanning region is adjusted based on the acquired scanned image data such that boundaries of adjacent scanning regions do not overlap the plurality of spots on the substrate.

20 Claim 2 (Cancelled).

Claim 3 (Previously Presented). The image data acquisition method according to claim 2, wherein the sequentially stored acquired scanned image data is stored by adding position information regarding respective scanning regions thereto.

Claim 4 (Previously Presented). The image data acquisition method according to claim 1, wherein the sample is a DNA microarray in which a plurality of spots are arranged as a measurement object.

Claim 5 (Previously Presented). The image data acquisition method according to claim 1, wherein the scanning by the light beam is performed by main scanning and sub-scanning in a direction orthogonal to the main scanning, and the size of the 5 scanning region is adjusted by regulating the number of scanning lines during the main scanning.

Claim 6 (Previously Presented). The image data acquisition method according to claim 1, wherein an analysis processing is executed for the stored scanned image data in parallel with scanning of a next region when the storage of the scanned image 5 data is complete.

Claim 7 (Cancelled).

Claim 8 (Previously Presented). The image data acquisition method according to claim 1, wherein the scanning by the light beam is carried out by main scanning and sub-scanning in a direction orthogonal to the main scanning, and both of the main 5 scanning and the sub-scanning are carried out by moving the sample.

Claim 9 (Previously Presented). The image data acquisition method according to claim 1, wherein the scanning by the light beam is carried out by main scanning and sub-scanning in a direction orthogonal to the main scanning, and the main scanning 5 is conducted with an optical scanner.